



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,305	05/04/2001	Charles A. Foote	742025-6	9620
22204	7590	05/04/2004	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			WONG, ALBERT KANG	
			ART UNIT	PAPER NUMBER
			2635	3

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,305

Applicant(s)

FOOTE, CHARLES A.

Examiner

Albert K Wong

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-13, 15, 17, 28-30, and 34-35 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 14, 16 and 18-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2635

1. This Office action is in response to the application filed May 4, 2001. Claims 1-35 are pending.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 17, it is not clear what is meant by "a utility".

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 9-13, 15, 28-30, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batz in view of Schleich.

Regarding claim 1, the claimed airborne platform is taught in col. 5, line 34-40; and the claimed ground based utility meter is taught in col. 6. Batz does not teach the transmission of meter data to a ground station. Schleich teaches a van for collecting meter data. This is functionally the same as the airborne platform. After the data has been collected, the data is transmitted to a host computer. Although Schleich does not the particular transmission mode, col. 7, lines 5-10 teach the use of serial data interface or other data transmission scheme. One of ordinary skill in the art would be familiar with the references since they both pertain to meter

Art Unit: 2635

reading using a remote platform. It would have been understood that other data transmission schemes would include wireless transmission. It would have been obvious to transmit the meter data from the platform to a ground station so that the user may be billed for the commodity consumed.

Regarding claim 2, Schleich teaches the communication of usage patterns.

Regarding claim 3, Batz teaches the transmission of usage data and meter id data.

Regarding claim 4, it would have been obvious to use a directional antenna to focus the signal for better reception. A focused signal would require less power and present less interference.

Regarding claim 5, the use of adaptive antenna control for better transmission is known in the art. It would have been obvious to include this feature for its known advantage.

Regarding claim 6, both reference teaches a computer in the mobile platform.

Regarding claim 9, see description of van in either reference for data storage device.

Regarding claim 10, the host computer in Schleich is the claimed ground based station that receives data from the mobile platform.

Regarding claim 11, inherent in the system in Batz is a display for a computer.

Regarding claim 12, since the mobile platform may transmit and receive data, it would have been obvious that transmission is not limited to meters but would include the host station.

Regarding claim 13, Schleich teaches the transmission of data form the platform via media or other transmission means. It would have been obvious that data may be received by the platform in a similar manner.

Art Unit: 2635

Regarding claim 15, Schleich teaches that the airborne platform may transmit as well as receive data wirelessly from the meter units. It would have been obvious to transmit and receive data from the ground based station in a similar manner.

Regarding claim 28, it is well known in the art that a utility meter may communicate with another meter or a home network. The inclusion of a well known feature for its known functionality would have been obvious. Communication with another meter allows the range of the automated meter system to be extended.

Regarding claims 29-30, these claims are the method equivalent to prior apparatus claims. Since the apparatus has been shown to be obvious, the method of operating the apparatus would also be obvious.

Regarding claim 34, the prior limitations have been discussed in Batz below. Batz does not teach the transmission of data from the platform and reception by a ground station. Schleich teaches the transfer of data from a platform to a ground station and suggests that any conventional communication method is contemplated, including serial transmission. While Schleich teaches the use of a van, Batz teaches that the airborne platform is the equivalent of a van since the same equipment is used.

6. Claims 32-33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batz.

Regarding claim 32, the steps of flying, transmitting and receiving are taught in Batz. Batz does not teach the determination of a flight path based on the location of the meters. It would have been obvious to one of ordinary skill in the art that the flight path would be dependent on the location of the meters since the transmitter on the meters have limited range.

Regarding claim 33, Batz teaches the transmission and reception of signals from the meter by the platform.

Regarding claim 35, one of ordinary skill in the art would have knowledge of antenna design. It would have been obvious to fly where the signal is strongest. Thus, the flight path should be based on the orientation of the antenna or meter transceiver.

7. Claims 7-8, 14, 16, 18-27, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claim 31 is allowed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert K Wong whose telephone number is 703-305-8884. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Albert K. Wong
April 27, 2004